

morton (S. G.)

AN INQUIRY

INTO

THE DISTINCTIVE CHARACTERISTICS

OF

THE ABORIGINAL RACE

OF

AMERICA.

BY SAMUEL GEORGE MORTON, M. D.,

Author of *Crania Americana*, *Crania Ægyptiaca*, &c.

SECOND EDITION.

29705

Box

PHILADELPHIA:
JOHN PENINGTON,

CHESTNUT STREET.

1844.

NOTE TO THE SECOND EDITION.

THE following Essay was read at the Annual Meeting of the Boston Society of Natural History, on the 27th of April, 1842, and published by direction of the Society. In the present edition I have made a few verbal corrections, and added some collateral facts in an Appendix.

I have taken a rapid glance at what I conceive to be the peculiar traits of the Aboriginal race of America, as embraced in five principal considerations, viz. : their organic, moral, and intellectual characters, their mode of interment, and their maritime enterprise ; and from these I have ventured to draw a few definite conclusions. I am aware that it may appear presumptuous to attempt so wide a range within the brief limits of the present occasion, especially as some points can be touched only in the most general manner ; but my object has been to dwell rather upon some of these which have hitherto received less attention than they obviously deserve, and which are intimately involved in the present inquiry.

S. G. MORTON.

Philadelphia, July 1, 1844.

ON THE
ABORIGINAL RACE OF AMERICA.

ETHNOGRAPHY,—the analysis and classification of the races of men,*—is essentially a modern science. At a time when Nature in her other departments, had been investigated with equal zeal and success, this alone remained comparatively neglected; and of the various authors who have attempted its exposition during the past and present centuries, too many have been content with closet theories, in which facts are perverted to sustain some baseless conjecture. Hence it has been aptly remarked that Asia is the country of fables, Africa of monsters, and America of systems, to those who prefer hypothesis to truth.

The intellectual genius of antiquity justly excites our admiration and homage; but in vain we search its records for the physical traits of some of the most celebrated nations of past time. It is even yet gravely disputed whether the ancient Egyptians belonged to the Caucasian race or to the Negro; and was it not for the light which now dawns upon us from their monuments and their tombs, this question might remain forever undecided. The present age, however, is marked by a noble zeal for these inquiries, which are daily making man more conversant with the organic structure, the mental character and the national affinities of the various and widely scattered tribes of the human family.

Among these the aboriginal inhabitants of America claim our especial attention. This vast theatre has been thronged, from immemorial time, by numberless tribes which lived only to destroy and be in turn destroyed, without leaving a trace

* Ethnography may be divided into three branches—1. Physical or Organic Ethnography; 2. Philological Ethnography; and 3. Historical Ethnography.

of their sojourn on the face of the earth. Contrasted with these were a few civilized communities, whose monuments awaken our surprise without unfolding their history; and he who would unravel their mysteries may be compared, in the language of the poets, to a man standing by the stream of time, and striving to rescue from its waters the wrecked and shattered fragments which float onward to oblivion.

It is not my present intention even to enumerate the many theories which have been advanced in reference to the origin of the American nations; although I may, in the sequel, inquire whether their genealogy can be traced to the Polyne-sians or Mongolians, Hindoos, Jews or Egyptians. Nor shall I attempt to analyse the views of certain philosophers who imagine that they have found not only a variety of races, but several *species* of men among the aborigines of this continent. It is chiefly my intention to produce a few of the more strikingly characteristic traits of these people to sustain the position that all the American nations, excepting the Eskimaux, are of one race, and that this race is peculiar, and distinct from all others.

1. *Physical Characteristics.* It is an adage among travelers that he who has seen one tribe of Indians, has seen all, so much do the individuals of this race resemble each other, notwithstanding their immense geographical distribution, and those differences of climate which embrace the extremes of heat and cold. The half-clad Fuegian, shrinking from his dreary winter, has the same characteristic lineaments, though in an exaggerated degree, as the Indians of the tropical plains; and these again resemble the tribes which inhabit the region west of the Rocky Mountains, those of the great valley of the Mississippi, and those again which skirt the Eskimaux on the North. All possess alike the long, lank, black hair, the brown or cinnamon colored skin, the heavy brow, the dull and sleepy eye, the full and compressed lips, and the salient but dilated nose. These traits, moreover, are equally common to the savage and civilized nations; whether they in-

habit the margins of rivers and feed on fish, or rove the forest and subsist on the spoils of the chase.

It cannot be questioned that physical diversities do occur, equally singular and inexplicable, as seen in different shades of color, varying from a fair tint to a complexion almost black; and this too under circumstances in which climate can have little or no influence. So also in reference to stature, the differences are remarkable in entire tribes which, moreover, are geographically proximate to each other. These facts, however, are mere exceptions to a general rule, and do not alter the peculiar physiognomy of the Indian, which is as undeviatingly characteristic as that of the Negro; for whether we see him in the athletic Charib or the stunted Chayma, in the dark Californian or the fair Borroa, he is an Indian still, and cannot be mistaken for a being of any other race.

The same conformity of organization is not less obvious in the osteological structure of these people, as seen in the squared or rounded head, the flattened or vertical occiput, the high cheek bones, the ponderous maxillæ, the large quadrangular orbits, and the low, receding forehead. I have had opportunity to compare nearly four hundred crania, derived from tribes inhabiting almost every region of both Americas, and have been astonished to find how the preceding characters, in greater or less degree, pervade them all.

This remark is equally applicable to the ancient and modern nations of our continent; for the oldest skulls from the Peruvian cemeteries, the tombs of Mexico and the mounds of our own country, are of the same type as the heads of the most savage existing tribes.* Their physical organization proves the origin of one to have been equally the origin of all. The various civilized nations are to this day represented by their lineal descendants who inhabit their ancestral seats, and differ in no exterior respect from the wild and uncultivated Indians; at the same time, in evidence of their lineage, Clavigero and other historians inform us, that the Mexicans and Peruvians yet possess a latent mental superiority which

*See Appendix, No. 1.—*Crania Americana, passim.*

has not been subdued by three centuries of despotism. And again, with respect to the royal personages and other privileged classes, there is indubitable evidence that they were of the same native stock, and presented no distinctive attributes excepting those of a social or political character.

The observations of Molina and Humboldt are sometimes quoted in disproof of this pervading uniformity of physical characters. Molina says that the difference between an inhabitant of Chili and a Peruvian is not less than between an Italian and a German; to which Humboldt adds, that the American race contains nations whose features differ as essentially from one another as those of the Circassians, Moors and Persians. But all these people are of one and the same *race*, and readily recognized as such, notwithstanding their differences of feature and complexion;* and the American nations present a precisely parallel case.

I was at one time inclined to the opinion that the ancient Peruvians, who inhabited the islands and confines of the Lake Titicaca, presented a congenital form of the head entirely different from that which characterizes the great American race; nor could I at first bring myself to believe that their wonderfully narrow and elongated crania, resulted solely from artificial compression applied to the rounded head of the Indian. That such, however, is the fact has been indisputably proved by the recent investigations of M. D'Orbigny. This distinguished naturalist passed many months on the table-land of the Andes which embraces the region of these extraordinary people, and examined the dessicated remains of hundreds of individuals in the tombs where they have lain for centuries. M. D'Orbigny remarked that while many of the heads were deformed in the manner to which we have adverted, others differed in nothing from the usual conformation. It was also observed that the flattened skulls were uniformly those of men, while those of the women remained unaltered; and again, that the most elongated heads were

*A portion of the Moorish population of Africa is a very mixed race of Arabs, Berbers, Negroes, &c.

preserved in the largest and finest tombs, shewing that this cranial deformity was a mark of distinction. But to do away with any remaining doubt on this subject, M. D'Orbigny ascertained that the descendants of these ancient Peruvians yet inhabit the land of their ancestors, and bear the name of *AYMARAS*, which may have been their primitive designation; and lastly, the modern Aymaras resemble the common Quichua or Peruvian Indians in every thing that relates to physical conformation, not even excepting the head, which, however they have ceased to mould artificially.*

Submitted to the same anatomical test, the reputed giant and dwarf races of America prove to be the mere inventions of ignorance or imposition. A careful inspection of the remains of both, has fully satisfied me that the asserted gigantic form of some nations has been a hasty inference on the part of unpractised observers; while the so-called pygmies of the valley of the Mississippi were mere children, who, for reasons not wholly understood, were buried apart from the adult people of their tribe.†

Thus it is that the American Indian, from the southern extremity of the continent to the northern limit of his range, is the same exterior man. With somewhat variable stature and complexion, his distinctive features, though variously modified, are never effaced; and he stands isolated from the rest of mankind, identified at a glance in every locality, and under every variety of circumstance; and even his dessicated remains which have withstood the destroying hand of time, preserve the primeval type of his race, excepting only when art has interposed to pervert it.

2. *Moral Traits.* These are, perhaps, as strongly marked as the physical characteristics of which we have just spoken; but they have been so often the subject of analysis as to claim only a passing notice on the present occasion. Among the most prominent of this series of mental operations is a sleepless caution, an untiring vigilance, which presides over every action and masks every motive. The Indian says nothing and

* See Appendix, No. 2.

† See Appendix, No. 3.

does nothing without its influence: it enables him to deceive others without being himself suspected; it causes that proverbial taciturnity among strangers which changes to garrulity among the people of his own tribe; and it is the basis of that invincible firmness which teaches him to contend unrepiningly with every adverse circumstance, and even with death in its most hideous forms.

The love of war is so general, so characteristic, that it scarcely calls for a comment or an illustration. One nation is in almost perpetual hostility with another, tribe against tribe, man against man; and with this ruling passion are linked a merciless revenge and an unsparing destructiveness. The Chickasaws have been known to make a stealthy march of six hundred miles from their own hunting grounds, for the sole purpose of destroying an encampment of their enemies. The small island of Nantucket, which contains but a few square miles of barren sand, was inhabited at the advent of the European colonies by two Indian tribes, who sometimes engaged in hot and deadly feud with each other. But what is yet more remarkable, the miserable natives of Terra del Fuego, whose common privations have linked them for a time in peace and fellowship, become suddenly excited by the same inherent ferocity, and exert their puny efforts for mutual destruction. Of the destructive propensity of the Indian, which has long become a proverb, it is almost unnecessary to speak; but we may advert to a forcible example from the narrative of the traveller Hearne, who accompanied a trading party of northern Indians on a long journey; during which he declares that they killed every living creature that came within their reach; nor could they even pass a bird's nest without slaying the young or destroying the eggs.

That philosophic traveller, Dr. Von Martius, gives a graphic view of the present state of natural and civil rights among the American aborigines. Their sub-division, he remarks, into an almost countless multitude of greater and smaller groups, and their entire exclusion and excommunication with regard to each other, strike the eye of the observer like the

fragments of a vast ruin, to which the history of the other nations of the earth furnishes no analogy. "This disruption of all the bands by which society was anciently held together, accompanied by a Babylonish confusion of tongues, the rude right of force, the never ending tacit warfare of all against all, springing from that very disrupture,—appear to me the most essential, and, as far as history is concerned, the most significant points in the civil condition of the aboriginal population of America."

It may be said that these features of the Indian character are common to all mankind in the savage state. This is generally true; but in the American race they exist in a degree which will fairly challenge a comparison with similar traits in any existing people; and if we consider also their habitual indolence and improvidence, their indifference to private property, and the vague simplicity of their religious observances,—which, for the most part, are devoid of the specious aid of idolatry,—we must admit them to possess a peculiar and eccentric moral constitution.

If we turn now to the demi-civilized nations, we find the dawn of refinement coupled with those barbarous usages which characterize the Indian in his savage state. We see the Mexicans, like the later Romans, encouraging the most bloody and cruel rites, and these, too, in the name of religion, in order to inculcate hatred of their enemies, familiarity with danger, and contempt of death; and the moral effect of this system is manifest in their valorous, though unsuccessful, resistance to their Spanish conquerors.

Among the Peruvians, however, the case was different. The inhabitants had been subjugated to the Incas by a combined moral and physical influence. The Inca family were looked upon as beings of divine origin. They assumed to be the messengers of heaven, bearing rewards for the good, and punishment for the disobedient, conjoined with the arts of peace and various social institutions. History bears ample testimony that these specious pretences were employed first to captivate the fancy and then to enslave the man. The fami-

liar adage that "knowledge is power," was as well understood by them as by us; learning was artfully restricted to a privileged class; and the genius of the few soon controlled the energies of the many. Thus the policy of the Incas inculcated in their subjects an abject obedience which knew no limit. They endeavored to eradicate the feeling of individuality; or, in other words, to unite the minds of the plebeian multitude in a common will, which was that of their master. Thus when Pizarro made his first attack on the defenceless Peruvians in the presence of their Inca, the latter was borne in a throne on the shoulders of four men; and we are told by Herrera that while the Spaniards spared the Sovereign, they aimed their deadly blows at his bearers, who, however, never shrunk from their sacred trust; for when one of their number fell, another immediately took his place; and the historian declares that if the whole day had been spent in killing them, others would still have come forward to the passive support of their master. In fact, what has been called the paternal government of the Incas was strictly such; for their subjects were children, who neither thought nor acted except at the dictation of another. Thus it was that a people whose moral impulses are known to have differed in little or nothing from those of the barbarous tribes, were reduced, partly by persuasion, partly by force, to a state of effeminate vassalage not unlike that of the modern Hindoos. Like the latter, too, they made good soldiers in their native wars, not from any principle of valor, but from the sentiment of passive obedience to their superiors; and hence, when they saw their monarch bound and imprisoned by the Spaniards, their conventional courage at once forsook them; and we behold the singular spectacle of an entire nation prostrated at a blow, like a strong man whose energies yield to a seemingly trivial but rankling wound.

After the Inca power was destroyed, however, the dormant spirit of the people was again aroused in all the moral vehemence of their race, and the gentle and unoffending Peruvian became transformed into the wily and merciless savage. Every

one is familiar with the sequel. Resistance was too late to be availing, and the fetters to which they had confidently submitted were soon riveted forever.

As we have already observed, the Incas depressed the moral energies of their subjects in order to secure their own power. This they effected by inculcating the arts of peace, prohibiting human sacrifices, and in a great measure avoiding capital punishments; and blood was seldom spilt excepting on the subjugation of warlike and refractory tribes. In these instances, however, the native ferocity of their race broke forth even in the bosom of the Incas; for we are told by Garcilaso, the descendant and apologist of the Peruvian kings, that some of their wars were absolutely exterminating; and among other examples he mentions that of the Inca Yupanqui against the province of Collao, in which whole districts were so completely depopulated that they had subsequently to be colonized from other parts of the empire: and in another instance the same unsparing despot destroyed twenty thousand Caranques, whose bodies he ordered to be thrown into an adjacent lake, which yet bears the name of the Sea of Blood. In like manner, when Atahualpa contested the dominion with Guascar, he caused the latter, together with thirty of his brothers, to be put to death in cold blood, that nothing might impede his progress to the throne.

We have thus endeavored to shew that the same moral traits characterize all the aboriginal nations of this continent, from the humanized Peruvian to the rudest savage of the Brazilian forest.

3. *Intellectual Faculties.* It has often been remarked that the intellectual faculties are distributed with surprising equality among individuals of the same race who have been similarly educated, and subjected to the same moral and other influences: yet even among these, as in the physical man, we see the strong and the weak, with numberless intermediate gradations. This equality is infinitely more obvious in savage than in civilized communities, simply because in th

former the condition of life is more equal; whence it happens that in contrast to a single master mind, the plebeian multitude are content to live and die in their primitive ignorance and inferiority.

This truth is obvious at every step of the present investigation; for of the numberless hordes which have inhabited the American continent, a fractional portion only has left any trace of refinement. I venture here to repeat my matured conviction that as a race they are decidedly inferior to the Mongolian stock. They are not only averse to the restraints of education, but seem for the most part incapable of a continued process of reasoning on abstract subjects. Their minds seize with avidity on simple truths, while they reject whatever requires investigation or analysis. Their proximity for more than two centuries to European communities, has scarcely effected an appreciable change in their manner of life; and as to their social condition, they are probably in most respects the same as at the primitive epoch of their existence. They have made no improvement in the construction of their dwellings, except when directed by Europeans who have become domiciliated among them; for the Indian cabin or the Indian tent, from Terra del Fuego to the river St. Lawrence, is perhaps the humblest contrivance ever devised by man to screen himself from the elements. Nor is their mechanical ingenuity more conspicuous in the construction of their boats; for these, as we shall endeavor to show in the sequel, have rarely been improved beyond the first rude conception. Their imitative faculty is of a very humble grade, nor have they any predilection for the arts or sciences. The long annals of missionary labor and private benefaction, present few exceptions to this cheerless picture, which is sustained by the testimony of nearly all practical observers. Even in those instances in which the Indians have received the benefits of education, and remained for years in civilized society, they lose little or none of the innate love of their national usages, which they almost invariably resume when left to choose for themselves.*

* *Crania Americana*, p. 81.

Such is the intellectual poverty of the barbarous tribes ; but contrasted with these, like an oasis in the desert, are the demi-civilized nations of the new world ; a people whose attainments in the arts and sciences are a riddle in the history of the human mind. The Peruvians in the south, the Mexicans in the north, and the Muyscas of Bogota between the two, formed these contemporary 'centres of civilization, each independent of the other, and each equally skirted by wild and savage hordes. The mind dwells with surprise and admiration on their cyclopean structures, which often rival those of Egypt in magnitude;—on their temples, which embrace almost every principle in architecture except the arch alone;—and on their statues and bas-reliefs which, notwithstanding some conventional imperfections, are far above the rudimentary state of the arts.*

I have elsewhere ventured to designate these demi-civilized nations by the collective name of the *TOLTECAN FAMILY* ; for although the Mexican annals date their civilization from a period long antecedent to the appparance of the Toltecas, yet the latter seem to have cultivated the arts and sciences to a degree unknown to their predecessors. Besides, the various nations which at different times invaded and possessed themselves of Mexico, were characterized by the same fundamental language and the same physical traits, together with a strong analogy in their social institutions : and as the appearance of the Incas in Peru was nearly simultaneous with the dispersion of the Toltecas, in the year 1050 of our era, there is reasonable ground for the conjecture that the Mexcans and Peruvians were branches of the same Toltecan stock.

*I cannot omit the present occasion to express my admiration of the recent discoveries of Mr. Stephens among the ruined cities of Central America and Yucatan. The spirit, ability, and success which characterize these investigations, are an honor to that gentleman and to his country ; and they will probably tend more than the labors of any other person to unravel the mysteries of American Archaeology. Similar in design to these are the researches of my distinguished friend, the Chevalier Freidrichthal, the result of whose labors, though not yet given to the world, are replete with facts of the utmost importance to the present inquiry.

We have alluded to a civilization antecedent to the appearance of the Incas, and which had already passed away when they assumed the government of the country. There are traditional and monumental evidences of this fact which can leave no doubt on the mind, although of its date we can form no just conception. It may have even preceded the Christian era, nor do we know of any positive reasons to the contrary. Chronology may be called the crutch of history ; but with all its imperfections it would be invaluable here, where no clue remains to unravel those mysterious records which excite our research but constantly elude our scrutiny. We may be permitted, however, to repeat what is all-important to the present inquiry, that these Ancient Peruvians were the progenitors of the existing Aymara tribes of Peru, while these last are identified in every particular with the people of the great Inca race. All the monuments which these various nations have left behind them, over a space of three thousand miles, go also to prove a common origin, because, notwithstanding some minor differences, certain leading features pervade and characterize them all.

Whether the hive of the civilized nations was, as some suppose, in the fabled region of Aztlan in the north, or whether, as the learned Cabrera has endeavored to shew, their native seats were in Chiapas and Guatemala, we may not stop to inquire ; but to them, and to them alone, we trace the monolithic gateways of Peru, the sculptures of Bogota, the ruined temples and pyramids of Mexico and the mounds and fortifications of the valley of the Mississippi.

Such was the Toltecan Family ; and it will now be inquired how it happens that so great a disparity should have existed in the intellectual character of the American nations, if they are all derived from a common stock, or in other words belong to the same race ? How are we to reconcile the civilization of the one with the barbarism of the other ? It is this question which has so much puzzled the philosophers of the past three centuries, and led them, in the face of facts, to insist on a plurality of races. We grant the seeming

anomaly ; but however much it is opposed to general rule, it is not without ample analogies among the people of the old world. No stronger example need be adduced than that which presents itself in the great Arabian family ; for the Saracens who established their kingdom in Spain, whose history is replete with romance and refinement, whose colleges were the centres of genius and learning for several centuries, and whose arts and sciences have been blended with those of every subsequent age ;—these very Saracens belong not only to the same race but to the same family with the Bedouins of the desert ; those intractable barbarians who scorn all restraints which are not imposed by their own chief, and whose immemorial laws forbid them to sow corn, to plant fruit-trees, or to build houses, in order that nothing may conflict with those roving and predatory habits which have continued unaltered through a period of three thousand years.

Other examples perhaps not less forcible, might be adduced in the families of the Mongolian race ; but without extending the comparison, or attempting to investigate this singular intellectual disparity, we shall, for the present, at least, content ourselves with the facts as we find them. It is important, however, to remark, that these civilized states do not stand isolated from their barbarous neighbors ; on the contrary they merge gradually into each other, so that some nations are with difficulty classed with either division, and rather form an intermediate link between the two. Such are the Araucanians, whose language and customs, and even whose arts, prove their direct affiliation with the Peruvians, although they far surpass the latter in sagacity and courage, at the same time that their social institutions present many features of intractable barbarism. So also the Aztec rulers of Mexico at the period of the Spanish invasion, exhibit, with their bloody sacrifices and multiform idolatry, a strong contrast to the gentler spirit of the Toltecas who preceded them, and whose arts and ingenuity they had usurped. Still later in this intermediate series were the Natchez tribes of the Mississippi, who retained some traces of the refinement of their Mexican

progenitors, mingled with many of the rudest traits of savage life. It is thus that we can yet trace all the gradations, link by link, which connect these extremes together ; showing that although the civilization of these nations is fast becoming obsolete, although their arts and sciences have passed away with a former generation, still the people remain in all other respects unchanged, although a variety of causes has long been urging them onward to deep degradation and rapid extinction. Strange as these intellectual revolutions may seem, we venture to assert that, all circumstances being considered, they are not greater than those which have taken place between the ancient and modern Greeks. If we had not incontestable evidence to prove the fact, who would believe that the ancestors of the Greeks of the present day were the very people who gave glory to the Age of Pericles !

It may still be insisted that the religion and the arts of the American nations point to Asia and Egypt ; but it is obvious, as Humboldt and others have remarked, that these resemblances may have arisen from similar wants and impulses, acting on nations in many respects similarly circumstanced. "It would indeed be not only singular but wonderful and unaccountable," observes Dr. Caldwell, "if tribes and nations of men, possessed of similar attributes of mind and body, residing in similar climates and situations, influenced by similar states of society, and obliged to support themselves by similar means, in similar pursuits,—it would form a problem altogether inexplicable if nations thus situated did not contract habits and usages, and, instinctively modes of life and action, possessing towards each other many striking resemblances." Here also we may draw an illustration from the old world ; for, notwithstanding the comparative proximity of the Hindoos and Egyptians, and the evident analogies in their architecture, mythology and social institutions, there is now no reason to believe them cognate nations ; and the resemblances to which we have adverted have probably arisen from mutual intercourse, independent of lineal affiliation. And so with the nations of America. The casual appearance of ship-

wrecked strangers would satisfactorily explain any sameness in the arts and usages of the one and the other, as well as those words which are often quoted in evidence of a common origin of language, but which are so few in number as to be readily accounted for on the foregoing principle.

The entire number of common words is said to be one hundred and four between the American languages and those of Asia and Australia ; forty-three with those of Europe ; and forty with those of Africa, making a total of one hundred and eighty-seven words. But taking into account the mere coincidence by which some of these analogies may be reasonably explained, I would inquire, in the language of an ingenious author, whether these facts are sufficient to prove a connexion between four hundred dialects of America and the various languages of the old world?

Even so late as the year 1833, a Japanese junk was wrecked on the northwest coast of America, and several of the crew escaped unhurt to the shore ; and I have myself seen some porcelain vessels which were saved on that occasion. Such casualties may have occurred in the early periods of American history ; and it requires no effort of the imagination to conceive the influence these persons might have exerted, in various respects, had they been introduced to the ancient courts of Peru and Mexico. They might have contributed something to extend or at least to modify the arts and sciences of the people among whom they were thrown, and have added a few words to the national language.

I am informed by my friend Mr. Townsend, who passed several months among the tribes of the Columbia river, that the Indians there have already adopted from the Canadian traders several French words, which they use with as much freedom as if they belonged to their own vocabulary.

It follows of course from the preceding remarks that we consider the American race to present the two extremes of intellectual character ; the one capable of a certain degree of civilization and refinement, independent of extraneous aids ; the other exhibiting an abasement which puts all mental cul-

ture at defiance. The one composed, as it were, of a handful of people whose superiority and consequent acquisitions have made them the prey of covetous destroyers; the other a vast multitude of savages tribes whose very barbarism is working their destruction from within and without. The links that connect them partake of the fate of the extremes themselves; and extinction appears to be the unhappy, but fast approaching doom of them all.

4. *Maritime Enterprise*.—One of the most characteristic traits of all civilized and many barbarous communities, is the progress of maritime adventure. The Caucasian nations of every age present a striking illustration of this fact: their sails are spread on every ocean, and the fabled voyage of the Argonauts is but a type of their achievements from remote antiquity to the present time. Hence their undisputed dominion of the sea, and their successful colonization of every quarter of the globe. The Mongolians and Malays, though active and predatory, and proverbially aquatic in their habits, are deficient in that mechanical invention which depends on a knowledge of mathematical principles; while they seem also incapable of those mental combinations which are requisite to a perfect acquaintance with naval tactics. The Negro, whose observant and imitative powers enable him to acquire with ease the details of seamanship, readily becomes a mariner, but rarely a commander; and history is silent on the nautical prowess of his race. Far behind all these is the man of America. Savage or civilized, the sea for him has had few charms, and his navigation has been almost exclusively restricted to lakes and rivers. A canoe excavated from a single log, was the principal vessel in use in the new world at the period of its discovery. Even the predatory Charibs, who were originally derived from the forests of Guayana, possessed no other boat than this simple contrivance, in which they seldom ventured out of sight of land; and never excepting in the tranquil periods of the tropical seas, when they sailed from shore to shore, the terror of the feebler natives of

the surrounding islands. The canoes of the Arouacs of Cuba were not more ingeniously contrived than those of the ruder Charibs; which is the more surprising since their island was the centre of a great archipelago, and their local position, therefore, in all respects calculated to develop any latent nautical propensities. When Cortez approached in his ships the Mexican harbor of Tobasco, he was astonished to find even there, the sea-port, as it were, of a mighty empire, the same primitive model in the many vessels that skimmed the sea before him. Let us follow this conqueror to the imperial city itself, surrounded by lakes, and possessed of warlike defences superior to those of any other American people. The Spanish commander, foreseeing that to possess the lake would be to hold the keys of the city, had fifteen brigantines built at Tlascala; and these being subsequently taken to pieces, were borne on men's shoulders to the lake of Mexico, and there re-constructed and launched. The war thus commenced as a naval contest; and the Spanish historians, while they eulogize the valour of the Mexicans, are constrained to admit the utter futility of their aquatic defences: for although the subjects of Montezuma, knowing and anticipating the nature of the attack, came forth from the city in several thousand boats, these were so feebly constructed, and managed with so little dexterity, that in a few hours they were all destroyed, dispersed or taken by the enemy.

Turning from the Mexicans, we naturally look to the Peruvians for some further advances in nautical skill; but although their country was comparatively a narrow strip of land, with an extended frontier on the ocean, we find even here the same primitive vessels and the same timid navigators. It is indeed questionable whether they ever designedly lost sight of land; nor does it appear that they made the sea subservient to their conquests. These were uniformly prosecuted by land, excepting perhaps those of the Incas, in their efforts to subdue the fierce islanders of Titicaca; but even the partial pen of Garcilaso limits all these inventions to log canoes and rafts of reeds; nor does it appear that the inge-

nulty of these people, so abundantly displayed on many other occasions, had ever added an improvement to the primeval germ of navigation.

Nor are those tribes which depend almost wholly on fish for their daily subsistence, much better provided than the others. The Chenouks and other nations on the western coast of America, have boats hewn with comparative ingenuity from a single plank, and compared to a butcher's tray; but in these frail vessels they keep cautiously within sight of land, and never venture on the water unless the weather is favorable to their enterprize. It is to be observed, however, that when the Indians are compelled to carry their boats across portages from river to river, they construct them of birch bark, and with a degree of ingenuity and adaptation much above their usual resources. Thus boats that would carry nine men do not weigh over sixty pounds, and are therefore conveyed with ease to considerable distances. This is almost the only deviation from the log canoe, and is equally characteristic; for it is common among the interior Indians of both North and South America, and was noticed by De Solis in the Mexican provinces.

Inferior in these respects to the other tribes are the Fuegians; a people whom perpetual exposure and privation, and the influence of an inhospitable climate, have reduced to a feeble intelligence,—the moral childhood of their race. Not even the stimulus of necessity has been able to excite that ingenuity which would so amply provide for all their wants; and they starve amid the abundant stores of the ocean because they possess no adequate means for obtaining them. The Falkland and Malouine islands, in but fifty degrees of South latitude, South Georgia, New South Shetland, and some smaller islands in nearly the same parallel, were, at their discovery, entirely uninhabited; nor is there any evidence of their ever having been visited by any American tribe. Yet they possess seals and other marine animals in vast numbers, and in these and all other respects appear to be not less productive than the region inhabited by the Eskimaux.

It is generally supposed that nautical enterprize results from the necessity of the case, in nations proximate to or surrounded by the sea. We have seen, however, that the natives of the islands of the Gulf of Mexico were exceptions to the rule ; and we find another not less remarkable in the archipelago of Chiloe, on the coast of Chili. These islands are seen from the shore, and have a large Indian population, which depends for subsistence on fish taken from the surrounding ocean ; yet even so late as the close of the past century, after more than two hundred years of communication with the Spaniards, their boats appear not to have been the least improved from their original model. The padre Gonzalez de Agueros, who resided many years among these islanders, describes their canoes as composed of five or six boards, narrowed at the ends, and lashed together with cords, the seams being filled with moss. They have sails, but neither keel nor deck ; and in these frail and primitive vessels the inhabitants commit themselves to a tempestuous sea in search of their daily food. The same miserable vessels are found in exclusive use in the yet more southern archipelago of Guaitacas, in which a sparse population is distributed over eight hundred islands, and depends solely on the sea for subsistence. The mechanical ingenuity of these people, therefore, is not greater than that of the other Indians ; but from constant practice with their wretched boats, they have acquired a dexterity in the use of them unknown to any other tribe, and in some instances, under the direction of the Spaniards, have become comparatively good mariners.

De Azara mentions a curious fact in illustration of the present inquiry. He declares that when his countrymen discovered the Rio de la Plata, they found its shores inhabited by two distinct Indian nations, the Charruas on the north, and the Patagonians on the south ; yet strange to say, these restless people had never communicated with each other for war or for peace, for good or for evil, because they had neither boats or canoes in which to cross the river.

The Indian is not defective in courage even on the water ;

but he lacks invention to construct better vessels, and tact to manage them. When he has been compelled to defend himself in his frail canoe, he has done so with the indomitable spirit of his race; yet with all his love of war and stratagem, I cannot find any account of a naval combat in which Europeans have borne no part.

The Payaguas Indians at one period took revenge on the Spaniards by infesting the rivers of Paraguay, in canoes which they managed with much adroitness; and darting from their lurking places, they intercepted the trading vessels going to and from Buenos Ayres, robbing them of their goods, and destroying their crews without mercy. Such was their success in these river piracies, that it required years of war and stratagem on the part of the Spaniards to subdue them.

The only example of a naval contest that I have met with, is described by Dobrizhoffer to have taken place between the so-called Mamalukes of St. Paulo, in Brazil, and their enemies the Guaranies. The former were a banditti derived from the intermarriage of the dregs of Europeans of all nations with the surrounding Indians; and, assisted by two thousand of their native allies, they came forth to battle in three hundred boats. The Guaranies, on the other hand, had five ships armed with cannon. But it is obvious, from this statement, that European vessels and European tactics gave the battle all its importance. It took place on the river Mborore, in Paraguay; but after all, both parties finding themselves out of their element on the water, at length abandoned their vessels by mutual agreement, and fought to desperation on shore.

It is said of the inhabitants of New Holland, that their only substitute for a boat is a short and solid log, on which they place themselves astride, and thus venture upon the water. Even this, the humblest of all human contrivances, was in use among the Indians of the Bay of Honduras, who had learned to balance themselves so dexterously standing upon a log, as to be able in this position to pursue their customary occupation of fishing in the adjacent sea.

In fine, his long contact with European arts, has furnished

the Indian with no additional means of contending with the watery element ; and his log canoe and boat of birch bark, are precisely the same as at the landing of Columbus.

5. *Manner of Interment.* Veneration for the dead is a sentiment natural to man, whether civilized or savage: but the manner of expressing it, and of performing the rites of sepulture, differ widely in different nations. No offence excites greater exasperation in the breast of the Indian than the violation of the graves of his people ; and he has even been known to disinter the bones of his ancestors, and bear them with him to a great distance, when circumstances have compelled him to make a permanent change of residence.

But the *manner* of inhumation is so different from that practised by the rest of mankind, and at the same time so prevalent among the American nations, as to constitute another means of identifying them as parts of a single and peculiar race. This practice consists in burying the dead in the *sitting posture*; the legs being flexed against the abdomen, the arms also bent, and the chin supported on the palms of the hands. The natives of Patagonia, Brazil, and Guayana ; the insular and other Charibs, the Florida tribes, the great chain of Lenapé nations, the inhabitants of both sides of the Rocky mountains, and those also of Canada and the vast Northwestern region, all conform, with occasional exceptions, to this conventional rite. So also with the demi-civilized communities from the most distant epochs ; for the ancient Peruvians, to whom we have already so frequently referred, possessed this singular usage, as is verified by their numberless remains in the sepulchres of Titicaca. They did not, however, bury their dead, but placed them on the floors of their tombs, seated, and sewed up in sacks. The later Peruvians of the Inca race followed the same custom, sometimes inhuming the body, at others placing it in a tower above ground. Garcilaso de la Vega informs us, that in the year 1560 he saw five embalmed bodies of the royal family, all of whom were seated in the Indian manner, with their hands crossed upon

the breast, and their heads bent forward. So also the Mexicans from the most ancient time had adopted the same usage, which was equally the privilege of the king and his people. The most remarkable exception to the practice in question, is that in which the body is dissected before interment, the bones alone being deposited in the earth. This extraordinary rite has prevailed among various tribes from the southern to the northern extremity of their range, in Patagonia, Brazil, Florida, and Missouri, and indeed in many intervening localities; but even in these instances, the bones are often retained in their relative position by preserving the ligaments, and then interred in the attitude of a person seated. An example among very many others is recorded by the Baron Humboldt, in his visit to a cavern-cemetery of the Atures Indians, at the sources of the Orinoco; wherein he found hundreds of skeletons preserved each in a separate basket, the bones being held together by their natural connexions, and the whole disposed in the conventional posture of which we are speaking.

I am well aware that this practice has been noticed by some navigators among the Polynesian islands; the instances, however, appear so few as rather to form exceptions to the rule, like those of the Nassamones of northern Africa: but I have sought for it in vain among the continental Asiatics, who, if they ever possessed it, would have yet preserved it among some at least of their numberless tribes.

After this rapid view of the principal leading characteristics of the American race, let us now briefly inquire whether they denote an exotic origin; or whether there is not internal evidence that this race is as strictly aboriginal to America as the Mongolian is to Asia, or the Negro to Africa.

And first, we turn to the Mongolian race, which by a somewhat general consent is admitted to include the Polar nations, and among them the Eskimaux of our continent. It is a very prevalent opinion that the latter people, who obviously belong to the Polar family of Asia, pass insensibly into the American race, and thus form the connecting link between the two. But without repeating what has already been

said in reference to the Indian, we may briefly advert, for the purpose of comparison, to the widely different characteristics of the Eskimaux. These people are remarkable for a large and rather elongated head, which is low in front and projecting behind; the great width and flatness of the face is noted by all travellers; their eyes are small and black, the mouth small and round, and the nose is so diminutive and depressed, that on looking at a skull in profile the nasal bones are hardly visible. Their complexion, moreover, is comparatively fair, and there is a tendency throughout life to fulness and obesity. The traveller Hearne, while in company with a tribe of northern Indians, mentions a circumstance which is at least curious, because it shows the light in which the Eskimaux are regarded by their proximate neighbors on the south. He was the unwilling witness of a premeditated and unprovoked massacre of an entire encampment of Eskimaux, men, women, and children; and it is curious to remark that the aggressors apologised for their cruelty not only on the plea of an ancient feud, but by asserting that their unoffending victims were a people of different nature and origin from themselves, even in respect to sexual conformation.

The moral character of the Eskimaux differs from that of the Indian chiefly in the absence of the courage, cunning, cruelty and improvidence so habitual in the red man, who, in turn, is inferior in mechanical ingenuity, and above all in aquatic exercises. The Eskimau, notwithstanding the intense cold of his climate, has been called an amphibious animal, so readily and equally does he adapt himself to the land or water. His boat is an evidence of mechanical skill, and the adroit manner in which he manages it is a proverb among mariners. The women are not less expert and enterprising than the men: each possesses a boat of peculiar and distinctive construction; and Crantz informs us that children of the tender age of seven or eight years commence the unassisted management of their own little vessels.

How strongly do these and other traits which might be enumerated, contrast with those of the Indian, and enforce an

ethnographic dissimilarity which is confirmed at every step of the investigation !

Some writers, however, think they detect in the Fuegian a being whose similar physical condition has produced in him all the characteristics of the Eskimau ; but we confidently assert that the latter is vastly superior both in his exterior organization and mental aptitude. In truth the two may be readily contrasted but not easily compared. The Fuegian bears a coarse but striking resemblance to the race to which he belongs, and every feature of his character assists in fixing his identity. The extremes of cold, with their many attending privations, by brutifying the features and distorting the expression of the face, reduce man to a mere caricature, a repulsive perversion of his original type. Compare the Mongols of Central Asia and China, with the Polar nations of Siberia. Compare also the Hottentot with the contiguous black tribes on the north ; the Tasmanian negro with the proper New Hollander ; and lastly, the wretched Fuegian with the Indian beyond the Magellanic strait ; and we find in every instance how much more the man of a cold and inhospitable clime is degraded, physically and intellectually, than his more fortunate but affiliated neighbor. The operation of these perverting causes through successive ages of time, has obscured but not obliterated those lineaments which, however modified, point to an aboriginal stock.

Without attempting to enter the fathomless depths of philology, I am bound to advert to the opinion of Mr. Gallatin, that all the nations from Cape Horn to the Arctic Ocean, have languages which possess "a distinct character common to all, and apparently differing from those of the other continent with which we are acquainted ;" an analogy, moreover, which is not of an indefinite kind, but consists, for the most part, in peculiar conjugational modes of modifying the verbs by the insertion of syllables. It has been insisted by some writers that this analogy proves the cognate relation of the Eskimaux and Indians. This, however, is a mere postulate ; for from the evidence already adduced in respect to the eth-

nographic difference between these people, we have a right to infer that the resemblance in their respective languages has not been derived by the greater from the lesser source,—not by the Americans from the Eskimaux, but the reverse : for the Asiatics having arrived at various and distant periods, and in small parties, would naturally, if not unavoidably, adopt more or less of the language of the people among whom they settled, until their own dialects finally merged in those of the Chepewyan and other Indians who bound them on the south.

The Eskimaux, it may be remarked, at the present time extend much further south, and are much more numerous on the western than on the eastern coast of America, being found as low down as Mount St. Elias ; south of which, contrary to what is observed on the opposite side of the continent, they become more or less blended with the Indian tribes, and have imparted to the latter some portion of their mechanical ingenuity. This difference in the extent and influence of the western and eastern Eskimaux, is explained by the proximity of the former to Asia ; and a redundant population has even forced some of them back to the parent hive, whither they have carried a dialect derived from the cognate tribes of America. Such are the Tsutchchi, who thus form a link between the Polar nations of the two continents.

It is a common opinion, also, that America has been peopled by the proper Mongols of central and eastern Asia ; and volumes have been written on supposed affinities, physical, moral and intellectual, to sustain this hypothesis. We have already glanced at the Mongolian features, as seen, though rudely and extravagantly developed, in the Polar nations ; but there are some characters so prevalent as to pervade all the ramifications of the great Mongolian stock, from the repulsive Calmuck to the polished and more delicately featured Chinese. These are the small, depressed, and seemingly broken nose ; the oblique position of the eye, which is drawn up at the external angle ; the great width between the cheek bones, which are not only high but expanded laterally ; the arched

and linear eyebrow; and lastly, the complexion, which is invariably some shade of yellow or olive, and almost equally distant from the fair tint of the European and the red hue of the Indian. Without attempting a detailed comparison, we may briefly observe that the Mongolian, in his various localities, is distinguished for his imitative powers and mechanical ingenuity, and for a certain degree of nautical skill, in which, as we have suggested, he holds a place next to the nations of the Caucasian race. In fine, we are constrained to believe that there is no more resemblance between the Indian and Mongol in respect to arts, architecture, mental features and social usages, than exists between any other two distinct races of mankind. Mr. Ranking has written an elaborate treatise to prove that the Mongols, led by a descendant of Genghis Khan, conquered Peru and Mexico in the thirteenth century; but in the whole range of English literature there cannot be found a work more replete with distorted facts and illogical reasoning. The author begins by the singular assertion that "when Cuzco was founded by Manco Capac, none of the civilization introduced by the Peruvians and Mexicans was in existence;" thus overlooking the cultivated tribes who preceded the Inca family, and disregarding also the various demi-civilized nations which successively followed each other in Mexico, before that country fell under the rule of the Aztecs.* Mr. Ranking introduces the Mongols in large ships, with all the appliances of war, not even excepting elephants; and in order that the Tartar general may correspond to Manco Capac, he is made to enter Peru by the Lake Titicaca, upwards of an hundred miles from the sea. Such statements may seem too absurd for sober discussion; but they are not more so than various other subterfuges which have been resorted to in explanation of the precise manner in which the new world has been peopled from the old.

But there is not a shadow of evidence that the Mongols ever reached America in ships excepting by mere accident; and therefore their number must have always been too small, and too badly provided, to have dreamt of conquest in a coun-

* *Crania Americana*, p. 96.

try which has had a population of millions from immemorial time.

There is a third view of this question which remains to be noticed; for, allowing that the Eskimaux and the cognate Polar nations are not the progenitors of the American race; and admitting also that the Mongols of central Asia could never have arrived in any requisite number by a direct voyage from one continent to the other, yet it is supposed by many learned men that these Mongols could have reached America by slow journeys from their own distant country; and that their hieroglyphic charts delineate many of the incidents of this protracted migration: but there is no positive evidence in regard to direction and localities, although these, by a very general consent, are placed in the north and northwest. Cabrera, on the contrary, after the most patient research, aided by unusual facilities for investigation, traces the primal seat of the civilized nations of America to southern Mexico, where the ruined cities of Copan, Uximal and Palenque, point to an epoch seemingly much more remote than any antiquities contained in or near the present metropolis of that country.

If we conventionally adopt the more prevalent opinion, and trace the Aztecs back to California or the strait, we have after all but a vague tradition of a handful of persons who, for all we know to the contrary, may have been as indigenous to America as any people in it. The aborigines of this continent have always been of nomadic and migratory habits; a fact which is amply illustrated in the traditional history of Mexico itself. So also with the barbarous tribes; for the Lenapé, the Florida Indians, the Iroquois, the insular Charibs and many others, were intruding nations, who, driven by want, or impelled by an innate and restless activity, had deserted their own possessions to seize upon others which did not belong to them. These nations, like their more polished neighbors, were in the constant practice of recording the events of their battles and hunting excursions by hieroglyphic symbols, made, according to circumstances, on trees, skins or rocks;

and this rude but expressive language of signs has been justly regarded as the origin of the picture-writing of the Mexicans. "The difference between them," observes Dr. Coates, "does not appear greater than must necessarily exist between ignorant warriors and hunters in a simple form of society, and those of the members of a complicated state possessed of property, and even, as described by Clavigero, of a species of science and literature."

This gradation of the ruder into the more perfect art of hieroglyphic writing, not only affords an additional argument for the unity of origin of the American nations, but also constitutes another proof of the distinctness of their race; for this picture-writing, even in its most elaborate forms, bears no other than the most general resemblance to any exotic hieroglyphics, nor indeed has a real equivalent been detected between them. We may therefore be permitted to repeat our conviction that the annals of the Mexicans bear no indisputable evidence of immigration from Asia; but, on the other hand, that they are susceptible of as many different interpretations as there are theories to be supported.

It is remarked by Dr. Coates, that the Mongolian theory, which we are now considering, is objectionable on account of its vastness. "To derive the population of the whole of the American continent from the northwestern angle, requires the supposition of a continued chain of colonies during a long succession of ages, acquiring and using an immense diversity of languages, and pursuing each other along the huge ridge of the great American Andes, from Prince William's Sound in the far north, to the extremity of Terra del Fuego, a distance of one hundred and fifteen degrees of latitude, or of eight thousand miles. This long succession of occurrences is absolutely necessary to the theory; which is thus liable to the difficulty of requiring two extensive hypotheses at once. Several hundred colonies must be imagined to have issued from the same point all completely isolated, as their languages abundantly show, unconnected by peaceful intercourse, but urging each other by war and the destruction of the game, throughout a third part of the circumference of the globe.

"The traces of such a series of human waves would be naturally looked for in a tendency to advance population in the north, from which they emanated, and where the pressure must have been greatest and the colonization of longest duration. Nothing like this is observed: the population of South America, and of Darien, Guatemala and Mexico, being much greater in proportion than that of any country farther north. The marks of early civilization, too, one of the most important proofs of long residence in a fixed spot, are all, as in the older world, in favor of the tropical climates."*

We may further inquire, how it happens that during the lapse of more than three hundred years since the discovery of America, there has not been an authenticated immigration from Asia? The long and desolating wars which have driven whole nations from the central to the northern parts of that continent, have not supplied a single colony to the New World. Nay, if such colonization had occurred within a thousand or two thousand years, would we not now possess more indubitable evidences of it in language, customs and the arts?

We propose in the next place, to make a very few observations in reference to the idea that America has been peopled by the MALAY race, which in the ordinary classification, includes the Malays proper of the Indian Archipelago, and the Polynesians in all their numberless localities. These people, however, have so much of the Mongolian character, that nearly the same objections arise to both. The head of the Malay proper, is more like that of the Indian, because it not unfrequently presents something of the vertical form of the occiput; and the transverse diameter, as measured between the parietal bones, is also remarkably large. But excepting in these respects, the osteological developement coincides with that of the Mongolian; while the category of objections which we have just urged against the latter people, is equally valid in respect to the whole Malay race. For independently of differences of organization, how great is the

*On the Origin of the Indian Population of America. By B. H. COATES, M. D. 1834.

disparity in their arts and social institutions ! So great, indeed, that to account for it, Dr. Lang, one of the most ingenious supporters of the theory, insists on an intellectual degeneracy consequent to change of climate and circumstances. "It is an easy and natural process," says he, "for man to degenerate in the scale of civilization, as the Asiatics have evidently done in travelling to the northward and eastward. He has only to move forward a few hundred miles into the wilderness, and settle himself at a distance from all civilized men, and the process will advance with almost incredible celerity. For whether he comes in contact with savages or not, in the dark recesses of the forest, his offspring will speedily arrive at a state of complete barbarism."

We confess our difficulty in imagining how the Polynesians, themselves a barbarous people, though possessing some of the attributes of civilized life, should become savages in the tropical regions of America, wherein the climate must be as congenial to their constitutions as their own, and the various other external circumstances are calculated to foster rather than to depress the energies of a naturally active and intelligent people. But the general prevalence of easterly winds is adverse to the colonization of America from the islands of the Pacific; for the nearest of these islands is one thousand eight hundred miles from the American coast; and when we reflect on the many difficulties which the mere distance opposes to navigation in small vessels, and the absolute necessity for food and water for a long period of time, we feel compelled to believe that America has received very feeble accessions to its population from the Polynesian islands. Such voyages, if admitted, could only have been accidental; for it is not to be supposed that these islanders would have attempted remote discoveries on the vast Pacific ocean in the very face of the trade winds; and a successful issue is among the least probable of human events.

Even admitting that the Polynesians have accomplished all that the theory requires, how does it happen that on reaching the continent of America, they should all at once have

relinquished their intuitive fondness for the water, forgotten the construction of their boats, and become the most timid and helpless navigators in the world?

A comparison of languages, moreover, gives no support to the Polynesian hypothesis; for all the zeal and ingenuity which have been devoted to this inquiry, have tended only to disclose a complete philological disparity.

The theories to which we have thus briefly adverted, would each derive the whole American population from a single source; but various others have been hazarded of a much more complex nature, by which the Indian nations are referred to a plurality of races, not even excepting the Caucasian. For example, the Peruvians, Muyscas and Mexicans, are by some advocates of this system supposed to be Malays or Polynesians, while all the savage tribes are referred to the Mongolians; whence the civilization of the one and the barbarism of the other. But we insist that the origin of these great divisions must have been the same, because all their ethnographic characters, not excepting the construction of their numberless languages, go to enforce an identity of race.

Another doctrine which has had many disciples, (among whom was the late Lord Kingsborough, author of *Mexican Antiquities*,) teaches that the whole American population is descended from the Jews, through the ten lost tribes which were carried away by Salmanazer, King of Assyria. Here again the differences of physical organization should set this question at rest for ever; but independently of these, can we suppose that a people so tenacious as the Jews of their literature, language and religion, would not have preserved a solitary, unequivocal memorial of either among the multitudinous tribes of this continent, if any direct affiliation had ever existed between them? In short, we coincide in opinion with a facetious author who sums up all the evidence of the case with the conclusion, that "the Jewish theory cannot be true for the simple reason that it is impossible."

We feel assured that the same objection bears not less strongly on every other hypothesis which deduces any por-

tion of the American nations from a Caucasian source. In order to solve the problem of the origin of the monuments of America, independently of any agency of the aboriginal race, an opinion has been advanced that they are the work of a branch of the great Cyclopean family of the old world, known by the various designations of the Shepherd Kings of Egypt, the Anakim of Syria, the Oscans of Etruria, and the Pelasgians of Greece. These *wandering masons*, as they are also called, are supposed to have passed from Asia into America at a very early epoch of history, and to have built those more ancient monuments which are attributed to the Toltecan nation. This view, supported as it is by some striking resemblances, and especially in architectural decoration, leaves various important difficulties entirely unexplained : it necessarily presupposes a great influx of foreigners to account for such numerous and gigantic remains of human ingenuity and effort, at the same time that no trace of this exotic family can be detected in the existing Indian population. They and their arts are equally eradicated ; and we can, at most, only conceive of the presence of these migratory strangers in small and isolated groups, which might have modified the arts of an antecedent civilization, while they themselves were too few in number to transmit their lineaments to any aboriginal community,

Closely allied to this theory is that of our ingenious countryman, Mr. Delafield, who derives the demi-civilized nations of America from "the Cuthites who built the monuments of Egypt and Indostan." He supposes them to have traversed all Asia to reach Behring's strait, and thus to have entered America at its northwest angle, whence they made their way by slow journeys to the central regions of the continent. Our objections to this theory will be found in what has been already stated; and we may merely add, that the *route* by which the author conducts his pilgrim adventurers appears to constitute the least plausible portion of his theory. Mr. Delafield supposes the barbarous tribes to be of a different stock, and refers them to the Mongolians of Asia; thus adopting the idea of a plurality of races.

We shall lastly notice an imaginative classification which separates the aborigines of America into four *species* of men, exclusive of the Eskimaux. This curious but unphilosophical hypothesis has been advanced by M. Bory de St. Vincent, a French naturalist of distinction, who considers the civilized nations to be cognate with the Malays, and designates them by the collective name of the *Neptunian species*; while to his three remaining species,—the Columbian, the American, and the Patagonian, he assigns certain vague geographical limits, without establishing any distinctive characteristics of the people themselves. The system is so devoid of foundation in nature, so fanciful in all its details, as hardly to merit a serious analysis; and we have introduced it on the present occasion to illustrate the extravagance, and the poverty, of some of the hypotheses which have been resorted to in explanation of the problem before us.

Once for all I repeat my conviction, that the study of physical conformation alone excludes every branch of the Caucasian race from any obvious participation in the peopling of this continent. If the Egyptians,* Hindoos, Phenicians, or Gauls have ever, by accident or design, planted colonies in America, these must have been, sooner or later, dispersed and lost in the waves of a vast indigenous population. Such we know to have been the fact with the Northmen, whose repeated, though very partial, settlements in the present New England States, from the tenth to the thirteenth centuries, are now matter of history; yet, in the country itself, they have not left a single indisputable trace of their sojourn.

In fine, our own conclusion, long ago deduced from a patient examination of the facts thus briefly and inadequately stated, is, that the American race is essentially separate and peculiar, whether we regard it in its physical, its moral, or its intellectual relations. To us there are no direct or obvious links between the people of the old world and the new; for even admitting the seeming analogies to which we have al-

* See Appendix No. 4.

luded, these are so few in number and evidently so casual as not to invalidate the main position: and even should it be hereafter shown, that the arts, sciences, and religion of America can be traced to an exotic source, I maintain that the organic characters of the people themselves, through all their endless ramifications of tribes and nations, prove them to belong to one and the same race, and that this race is distinct from all others.

This idea may, at first view, seem incompatible with the history of man, as recorded in the Sacred Writings. Such, however, is not the fact. Where others can see nothing but chance, we can perceive a wise and obvious design, displayed in the original adaptation of the several races of men to those varied circumstances of climate and locality which, while congenial to the one, are destructive to the other. The evidences of history and the Egyptian monuments go to prove that these races were as distinctly stamped three thousand five hundred years ago as they are now; and, in fact, that they are coeval with the primitive dispersion of our species.

APPENDIX

No. 1.

On the 6th of July, 1841, I made the following communication to the Academy of Natural Sciences of Philadelphia; and now extract it from the *Proceedings* of the Society of that date:

I submit to the inspection of the members eight adult skulls of the ancient Mexican race, for six of which I am indebted to Don J. Gomez de la Cortina, and for the other two to Dr. John P. Macartney of the city of Mexico. All these crania have been received since the publication of my *Crania Americana*.

The skulls are supposed to be of the following nations:

1. OTOMIES?—Four in number, with the high vertex, flat occiput, great lateral diameter, and broad face, characteristic of the American race. The Otomies preceded the Toltecas, and were the least cultivated of the demi-civilized nations of Anahuac. The largest of these heads gives 92 cubic inches of internal capacity; the smallest, that of a female, only 67.

2. **CHECHEMECAN ?**—A single skull, of 83 cubic inches of internal capacity. This nation followed the Toltecas in the possession of Mexico in the 11th century of our era. They were nomades and hunters, but rapidly acquired the arts and civilization of their predecessors.
3. **TLASCALAN?**—A single cranium. These people formed one of the seven tribes who established themselves in Mexico during the Chechemecan monarchy, and are renowned in history for their warlike exploits. They are well known to have rendered Cortez essential aid in taking the city of Mexico. This skull gives an internal capacity of 84 cubic inches, and like the others of this series, is remarkable for its diameter between the parietal bones.

It is worthy of remark that the average internal capacity of these six authentic Mexican skulls, is precisely what I have accorded to these people in my *Crania Americana*, viz., seventy-nine cubic inches. The mean of the facial angle also accords with my previous measurements, and gives 75°.

All these heads were obtained from tumuli or mounds, within the territories of the nations whose names they bear, so as to leave no doubt in the mind of the distinguished gentleman from whom I received them, of their having pertained to individuals of those nations.

The two remaining crania are supposed to be those of **AZTECS**, who also belonged to the confederacy of the seven tribes, but were the last to take possession. These were the people who subsequently obtained the supreme power, and under the name of Aztecs, or Mexicans, governed the country at the epoch of the Spanish invasion, A. D. 1521. The Aztecs were a brave and intelligent people, but remarkable for bloody rites, both in their warlike and religious observances. They were less cultivated than the Toltecas, but much more so than the surrounding barbarous tribes; and appear, in fact, to have been the connecting link between the two. The largest of these heads gives 85 cubic inches of internal capacity; the smallest 77; the medium being 80 cubic inches. The configuration of these heads is on the same

model as the preceding series, and the mean facial angle differs but a single degree.

Whoever will be at the pains to compare this series of skulls with those from the barbarous tribes, will, I think, agree that the facts thus derived from organic characters corroborate the position I have long maintained, that all the American nations, excepting the polar tribes, are of one race and one species, but of two great families, which resemble each other in physical but differ in intellectual character.

At a subsequent meeting of the Society, (August 9, 1842,) I exhibited the remains of a human skeleton found by Mr. J. L. Stevens in a vault or tomb at the ruins near Ticul, nineteen leagues from Merida, in Yucatan. These bones have pertained to a female, whose stature has not exceeded five feet three inches, at the same time that the absence of *epiphyses* and consequent consolidation of the bones are proofs of adult age. From the appearance of the teeth, however, which are fresh, and not sensibly worn, and a line or furrow marking off the crista of the ilium, it is presumed that this individual had not passed her twentieth year. The bones of the head, which are still partially separable at the sutures, are admirably characteristic of the *American Race*, as seen in the vertical occiput and the great inter-parietal diameter, which measures five inches and eight-tenths. The head is of full size, in proportion to the rest of the skeleton, of which the bones are of very delicate proportions, especially those of the feet and hands. An interesting feature of this skeleton is, the occurrence of a large spongy *node* on the upper and inner surface of the left tibia, on which it extends about two inches in length, an inch in breadth, and half an inch in thickness. Dr. Bridges having subjected some fragments of these bones to the usual chemical tests, found them in a very great degree deprived of animal matter—an additional evidence of their antiquity.*

* See Stephens; Incidents of Travel in Yucatan, vol. i., p. 281.

No. 2.

REMARKS ON THE ANCIENT PERUVIANS.

(From the 8th vol. of the Journal of the Acad. of Natural Sciences of Philadelphia.)

In my work on American skulls, (*Crania Americana*), I have expressed the opinion that the heads of the ancient Peruvians were *naturally* very much elongated; and that they differed in this respect from those of the Inca Peruvians, and other surrounding nations; and having given this opinion at a meeting of the Academy prior to the publication of my work, I take the present occasion to renounce it.

In the American Journal of Science, for March, 1840, I have already, in a brief note, adverted to this change of opinion; and I now repeat my matured conclusions, in connection with positive facts, derived from the work of a distinguished traveller and naturalist, M. Alcide D'Orbigny.

This gentleman not only visited the elevated table-land of the Andes, which was once inhabited by the ancient Peruvians, but he remained a long time in that interesting region, and has collected numerous facts in relation of the people themselves.

1. The descendants of the ancients Peruvians yet inhabit the land of their ancestors, and bear the name of Aymaras, which was probably their primitive designation.

2. The modern Aymaras resemble the surrounding Quichua or Peruvian nations in color, figure, features, expression, shape of the head, (which they have ceased to mould into artificial forms,) and in fact in every thing that relates to physical conformation and social customs. Their languages differ, but even here there is a resemblance which proves a common origin.

3. On examining the tombs of the ancient Aymaras, in the environs of the lake Tittcaca, M. D'Orbigny remarked that those which contained the compressed and elongated skulls, contained also a greater number that were not flattened; whence he infers

that the deformity was not natural, or characteristic of the nation, but the result of mechanical compression.

4. It was also remarked that those skulls which were flattened were uniformly those of men, while the heads of the women always retained the natural shape,—the squared or spheroidal form which is characteristic of the American race, and especially of the Peruvians.

5. The most elongated heads were found in the largest and finest tombs ; showing that the deformity was a mark of distinction among these people.

6. The researches of M. D'Orbigny confirm the statements made at distant intervals of time by Pedro de Cieza, Garcilaso de la Vega, and Mr. Pentland, and prove conclusively, what I have never doubted, that these people were the architects of their own tombs and temples ; and not, as some suppose, intruders, who had usurped the civilization, and appropriated the ingenuity of an antecedent and more intellectual race.

M. D'Orbigny found temples from 100 to 200 metres in length, facing the east, and ornamented with rows of angular columns ; enormous gateways made of a single mass of rock, and covered with bas reliefs ; colossal statues of basalt ; and large square tombs, wholly above ground, and in such numbers that they are compared to towns and villages.

My published observations go to show that the internal capacity of the cranium, as indicative of the size of the brain, is nearly the same in the ancient and modern Peruvians, viz., about seventy-six cubic inches — a smallness of size which is without a parallel among existing nations, excepting only the Hindoos.

M. D'Orbigny even supposes the ancient Peruvians to have been the lineal progenitors of the Inca family ; a question which is not yet decided. Supposing this to be the fact, we may inquire how it happens that the Incas should have abandoned the practice of distorting the cranium ; especially as this, among the Aymaras, was an aristocratic privilege ?

I was at first at a loss to imagine how this singular elongation of the head had been effected ; for when pressure is applied to a spher-

roidal head, as in the instance of the Chenouks and other tribes of the Columbia river, the skull expands *laterally* in proportion as it is depressed above; whereas, in these people, the head is narrow from the face to the occiput. It seems probable that this conformation was produced by placing splints or compresses on each side of the head from the cheek bones to the parietal protuberances, and another on the forehead, and confining them by rotary bandages. In this way the face, in the process of growth, would be protruded in front, and the head elongated backwards; while the skull, in all other directions, could expand comparatively little. These remarks will be more readily understood by reference to the annexed outlines, which are taken from a cast of one of the skulls obtained by Mr. Pentland.



Dr. Goddard has suggested to me that the deformity observable in this series of crania, might have been produced by the action of rotary bandages alone, without the use of splints or compresses. I admit the possibility of this result in some of the heads, but think that in others there is satisfactory evidence of the employment of the splint or compress, especially on the os frontis.

I have in my possession six casts of heads and three skulls of these people, all of which present the peculiarly elongated form in question.

No. 3.

REMARKS ON THE SO-CALLED PIGMY RACE OF THE
VALLEY OF THE MISSISSIPPI.

(From the 8th vol. of the Journal of the Acad. of Natural Sciences of Philadelphia.)

It had long been contended by intelligent persons, who, however, were ignorant of Anatomy, that the adjusted bones of these pretended Pigmies never exceeded four feet and a half in length, and were often but three feet, notwithstanding the asserted indications of adult age. These statements made me desirous to investigate the subject by means of a skeleton of one of these people, which I at length obtained through the kindness of Dr. Troost, of Nashville; Dr. M'Call, an intelligent correspondent of Dr. Troost, having exhumed the remains from a "Pigmy cemetery" near the Cumberland Mountain, in White county, Tennessee.

"The coffins," observes Dr. M'Call, in his letter addressed to me, "are from 18 to 24 inches in length, by 18 inches deep, and 15 wide. They are made of six pieces of undressed sandstone or limestone, in which the bodies are placed with their shoulders and head elevated against the eastern end, and the knees raised towards the face, so as to put the corpse in a reclined or sitting posture. The right arm rested on an earthen pot, of about two pints in capacity, without legs, but with lateral projections for being lifted. With these pots, in some graves, are found basins and trays also of pipe clay and comminuted shells mixed; and no one of these repositories is without cooking utensils. In one of the graves was found a complete skull, and an os femoris, but most of the other bones were broke in hastily removing them. This is said to be the

largest skeleton ever found at any of these burying grounds. It has the cranium very flat and broad, with very projecting front teeth, and appears to have pertained to an individual not over twelve or fourteen years of age."

The bones which accompanied the letter indicate a very juvenile subject. For example, many of the deciduous or first teeth yet remain in both jaws; while the only teeth of the permanent set which have protruded, are the first molars and the incisors, which, as every anatomist knows, make their appearance at about seven years of age. Of the other permanent teeth, some have no part formed but the crown, and all are completely within the maxillary bones. The presence of the new incisors, isolated from the cuspidati which have not appeared, obviously gave rise to Dr. M'Call's remark respecting the very "projecting front teeth," but which, however, are perfectly natural in position and proportion. The cranial bones are thin, and readily separable at the sutures; nor does the *flat and broad* configuration of the cranium differ from what is common to the aboriginal American race. The long bones have their extremities separated by epiphyses; and every fact observed in these remains is strictly characteristic of early childhood, or about the eighth year of life. Even the recumbent or sitting posture in which they are found, has been observed in the dead bodies of the American nations from Cape Horn to Canada; and the utensils found with them are the same in form and composition with those exhumed from the graves of the common Indians.

These remains are to me an additional and convincing proof of what I have never doubted—viz., that the so-called Pigmies of the western country were merely children, who, for reasons not readily explained, but which actuate some religious communities of our own time, were buried apart from the adult people of their tribe.

No. 4.

With respect to the Egyptians and Hindoos, as involved in this question, I can speak without reservation. Through the kindness of an accomplished gentleman and scholar, George R. Gliddon, Esq., late United States Consul at Cairo, I have received one hundred heads of Egyptian mummies from the tombs of Abydos, Thebes and Memphis, &c.; and I unhesitatingly declare, that, with a few exceptions, which have a mixed character, and chiefly resemble the Coptic form, the conformation throughout is that of the Caucasian race.

The following extracts from my *Crania Ægyptiaca*, just now published, appear to me to be conclusive on this point:

"It was remarked fifty years ago, by the learned Professor Blumenbach, that a principal requisite for an inquiry such as we now propose, would be "a very careful, technical examination of the skulls of mummies hitherto met with, together with an accurate comparison of these skulls with the monuments." This is precisely the design I have in view in the following memoir, which I therefore commence by an analysis of the characters of all the crania now in my possession. These may be referred to two of the great races of men, the CAUCASIAN and the NEGRO, although there is a remarkable disparity in the number of each. The Caucasian heads also vary so much among themselves as to present several different types of this race, which may, perhaps, be appropriately grouped under the following designations:—

CAUCASIAN RACE.

1. The **Pelasgic Type*. In this division I place [those heads which present the finest conformation, as seen in the Caucasian nations of western Asia, and middle and southern Europe. The

* I do not use this term with ethnographic precision; but merely to indicate the most perfect type of cranio-facial outline.

Pelasgic lineaments are familiar to us in the beautiful models of Grecian art, which are remarkable for the volume of the head in comparison with that of the face, the large facial angle, and the symmetry and delicacy of the whole osteological structure.

2. The *Semitic Type*, as seen in the Hebrew communities, is marked by a comparatively receding forehead, long, arched and very prominent nose, a marked distance between the eyes, a low, heavy, broad and strong and often harsh development of the whole facial structure.

4. The *Egyptian* form differs from the Pelasgic in having a narrower and more receding forehead, while the face being more prominent, the facial angle is consequently less. The nose is straight or aquiline, the face angular, the features often sharp, and the hair uniformly long, soft, and curling. In this series of crania I include many of which the conformation is not appreciably different from that of the Arab and Hindoo; but I have not, as a rule, attempted to note these distinctions, although they are so marked as to have induced me, in the early stage of the investigation, and for reasons which will appear in the sequel, to group them, together with the proper Egyptian form, under the provisional name of *Austral-Egyptian* crania.

NEGRO RACE.

The true *Negro* conformation requires no comment; but it is necessary to observe that a practised eye readily detects a few heads with decidedly mixed characters, in which those of the Negro predominate. For these I propose the name of *Negroid* crania; for while the osteological development is more or less that of the Negro, the hair is long but sometimes harsh, thus indicating that combination of features which is familiar in the mulatto grades of the present day. It is proper, however, to remark in relation to the whole series of crania, that while the greater part is readily referrible to some one of the above subdivisions, there remain a few other examples in which the Caucasian traits predominate, but are partially blended with those of the Negro, which last modify both the structure and expression of the head and face.

The following is a Tabular View of the whole series of crania, arranged, in the first place, according to their sepulchral localities, and, in the second, in reference to their national affinities.

Ethnographic Table of one hundred ancient Egyptian Crania.

Sepulchral Localities.	No.	Egyptian.	Pelasgic.	Semitic.	Mixed.	Negroid.	Negro.	Idiot.
Memphis,	26	7	16	1	1	1		
Maabdeh,	4	1	1			2		
Abydos,	4	2	1	1				
Thebes,	55	30	10	4	4	5		2
Ombos,	3	3						
Philæ,	4	2	1				1	
Debôd,	4	4						
	100	49	29	6	5	8	1	2

No. 5.

CLASSIFICATION OF THE HUMAN SPECIES.

The following classification is a slight modification of that published in my *Crania Americana*. The *Races* correspond with those in Prof. Blumenbach's system, which latter differs but little from that of Buffon. The subdivision into *Families* is based upon ethnographic analogies, both physical and philological.

I. CAUCASIAN RACE.

A. THE JAPETIC OR INDO-EUROPEAN BRANCH.

1. The Pelasgic or Caucasian Family.
2. The Germanic Family.
3. The Celtic Family.
4. The Indostanic Family.

B. THE SEMITIC OR SYRO-ARABIAN BRANCH.

5. The Arabian Family.

6. The Hebrew Family.

C. THE HAMITIC OR ÆGYPTO-LIBYAN BRANCH.

7. The Nilotic or Egyptian Family.

8. The Libyan Family.

II. THE MONGOLIAN RACE.

9. The Mongol-Tartar Family.

10. *The Turkish Family.

11. The Chinese Family.

12. †The Indo-Chinese Family.

13. The Polar Family.

III. THE MALAY RACE.

14. The Malay Family.

15. The Polynesian Family.

IV. THE AMERICAN RACE.

16. The American Family.

17. The Toltecان Family.

V. THE NEGRO RACE.‡

18. The Negro Family.

19. The Caffrarian Family.

20. The Austral-African or Hottentot Family.

21. The Oceanic-Negro Family.

22. The Australian Family.

*The Turks are a mixed family of the Caucasian and Mongolian races, in which the latter preponderates.

† The Indo-Chinese nations may yet prove to belong to the Malay race.

‡ Called the Ethiopian Race by Professor Blumenbach.